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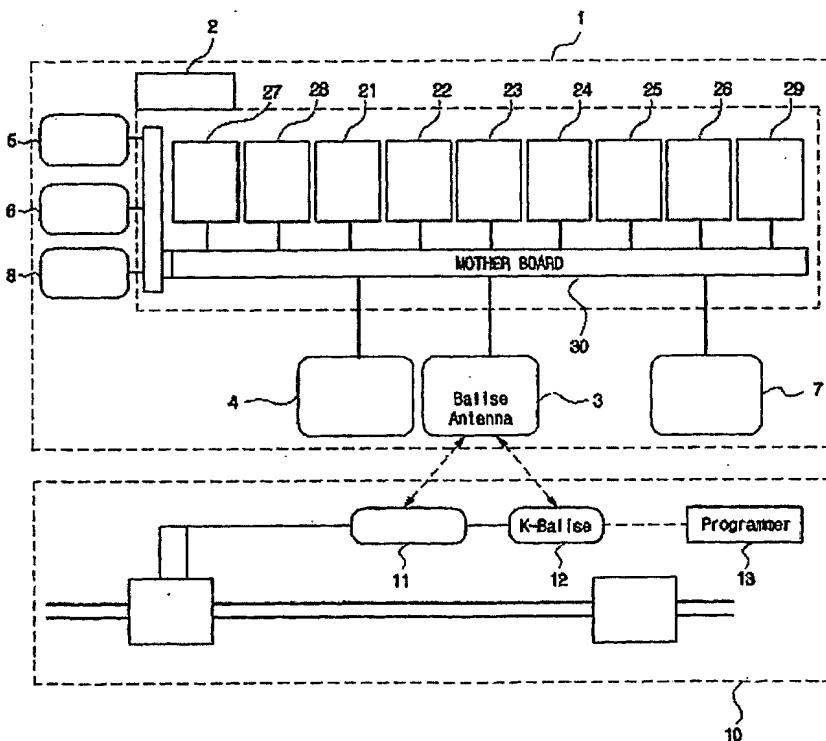
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- (71) Applicant (*for all designated States except US*): SHALOM ENGINEERING CO., LTD [KR/KR]; ROOM11, 16TH FLOOR, TECHNOMART, 546-4 GUI-DONG, KWANGJIN-GU, SEOUL 143-200 (KR).
- (72) Inventor; and
- (75) Inventor/Applicant (*for US only*): KIM, Bong-Taek
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(54) Title: ATPS FOR CONTROLLING TRAIN USING DATA COMMUNICATION



(57) Abstract: The present invention relates to an automatic train protection stop (ATPS) device. The ATPS of the present invention is provided with both the functions of an automatic train protection (ATP) and an automatic train stop (ATS) by adding a K-Balise, on the ground, which is capable of transmitting ground information using a small air-gap data communication, and a ground information memory pack on a train. The present invention includes an on-board equipment including a main device, an on-board antenna, a speed detector connected to a shaft of wheel, an operation switch, a train controller, and a communication module; and a ground equipment including an ATS beacon connected to a track occupancy detection device, a K-Balise using data communication, and a program part for inputting ground information data to the K-Balise. According to the present invention, it is possible to implement the high-speed data communication and to secure the security and reliability by operating

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in an available distance in electric source free scheme. Also, it has advantages of self-testing and operation recoding and maintaining functions and the improvement of the stability by protecting the no reaction and malfunctioning.



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